

	U	1	Document ID	Issue Date	Pages	Title
1	<input checked="" type="checkbox"/>	<input type="checkbox"/>	US 20040067542 A1	20040408	18	P2y purinergic receptor expression for identifying preneoplastic and neoplastic states
2	<input checked="" type="checkbox"/>	<input type="checkbox"/>	US 20040018533 A1	20040129	107	Diagnosing predisposition to fat deposition and therapeutic methods for reducing fat deposition and treatment of associated
3	<input checked="" type="checkbox"/>	<input type="checkbox"/>	US 6242216 B1	20010605	40	Nucleic acids encoding a functional human purinoreceptor P2X2 and P2X4, and methods of production and use thereof
4	<input checked="" type="checkbox"/>	<input type="checkbox"/>	JP 2003093099 A	20030402	15	OSTEOCLAST DIFFERENTIATION-ASSOCIATED GENE
5	<input type="checkbox"/>	<input type="checkbox"/>	WO 9741222 A1	19971106	32	HUMAN P2x4 RECEPTOR SPLICE-VARIANTS
6	<input checked="" type="checkbox"/>	<input type="checkbox"/>	US 6242216 B	20010605	40	Isolated polynucleotides, used to produce PX2 receptor polypeptides and identify potentially therapeutic compounds, encode a human P2X2 receptor polypeptide

	Current OR	Current XRef	Retrieval Classif	Inventor	S	C	P	2	3
1	435/7.23			Barden, Julian et al.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2	435/6			Adam, Gail Isabel Reid et al.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3	435/69.1	435/252.3; 435/320.1; 536/23.5		Lynch, Kevin J. et al.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4				TAKEYA, TATSUO	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5				MCHALE, MARK THOMAS et al.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6				BURGARD, E C et al.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

	4	5	Image Doc. Displayed	PT
1	<input type="checkbox"/>	<input type="checkbox"/>	US 20040067542	<input type="checkbox"/>
2	<input type="checkbox"/>	<input type="checkbox"/>	US 20040018533	<input type="checkbox"/>
3	<input type="checkbox"/>	<input type="checkbox"/>	US 6242216	<input type="checkbox"/>
4	<input type="checkbox"/>	<input type="checkbox"/>	JP 2003093099 A	<input type="checkbox"/>
5	<input type="checkbox"/>	<input type="checkbox"/>	WO 9741222 A1	<input type="checkbox"/>
6	<input type="checkbox"/>	<input type="checkbox"/>	US 6242216	<input type="checkbox"/>

Trying 31060000009999...Open

DIALOG INFORMATION SERVICES

PLEASE LOGON:

***** HHHHHHHH SSSSSSSS? ### Status: Signing onto Dialog *****

ENTER PASSWORD:

***** HHHHHHHH SSSSSSSS? *****

Welcome to DIALOG

Status: Login successfulDialog level 04.09.00D

Last logoff: 21may04 13:46:08

Logon file405 27may04 13:01:24

*** ANNOUNCEMENT ***

--File 654 - US published applications from March 15, 2001 to the present are now online. Please see HELP NEWS 654 for details.

--File 581 - The 2003 annual reload of Population Demographics is complete. Please see Help News581 for details.

--File 990 - NewsRoom now contains February 2003 to current records. File 992 - NewsRoom 2003 archive has been newly created and contains records from January 2003. The oldest months's records roll out of File 990 and into File 992 on the first weekend of each month. To search all 2003 records BEGIN 990, 992, or B NEWS2003, a new OneSearch category.

--Connect Time joins DialUnits as pricing options on Dialog. See HELP CONNECT for information.

--SourceOne patents are now delivered to your email inbox as PDF replacing TIFF delivery. See HELP SOURCE1 for more information.

--Important Notice to Freelance Authors--
See HELP FREELANCE for more information

NEW FILES RELEASED

***AeroBase (File 104)

***DIOGENES: Adverse Drug Events Database (File 181)

***World News Connection (File 985)

***Dialog NewsRoom - 2003 Archive (File 992)

***TRADEMARKSCAN-Czech Republic (File 680)

***TRADEMARKSCAN-Hungary (File 681)

***TRADEMARKSCAN-Poland (File 682)

UPDATING RESUMED

RELOADED

***Toxfile (File 156)

***Medline (Files 154-155)

***Population Demographics -(File 581)

***CLAIMS Citation (Files 220-222)

REMOVED

>>> Enter BEGIN HOMEBASE for Dialog Announcements <<<
>>> of new databases, price changes, etc. <<<

* ALL NEW CURRENT YEAR RANGES HAVE BEEN * * *
* * * INSTALLED * * *
*

SYSTEM:HOME

Cost is in DialUnits

Menu System II: D2 version 1.7.9 term=ASCII

*** DIALOG HOMEBASE(SM) Main Menu ***

Information:

1. Announcements (new files, reloads, etc.)
2. Database, Rates, & Command Descriptions
3. Help in Choosing Databases for Your Topic
4. Customer Services (telephone assistance, training, seminars, etc.)
5. Product Descriptions

Connections:

6. DIALOG(R) Document Delivery
7. Data Star(R)

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/H = Help

/L = Logoff

/NOMENU = Command Mode

Enter an option number to view information or to connect to an online service. Enter a BEGIN command plus a file number to search a database (e.g., B1 for ERIC).

?

Terminal set to DLINK

*** DIALOG HOMEBASE(SM) Main Menu ***

Information:

1. Announcements (new files, reloads, etc.)
2. Database, Rates, & Command Descriptions
3. Help in Choosing Databases for Your Topic
4. Customer Services (telephone assistance, training, seminars, etc.)
5. Product Descriptions

Connections:

6. DIALOG(R) Document Delivery
7. Data Star(R)

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/H = Help

/L = Logoff

/NOMENU = Command Mode

Enter an option number to view information or to connect to an online service. Enter a BEGIN command plus a file number to search a database (e.g., B1 for ERIC).

? b biochem, biotech

27may04 13:01:36 User276619 Session D5.1

\$0.00 0.155 DialUnits FileHomeBase

\$0.00 Estimated cost FileHomeBase

\$0.05 TELNET

\$0.05 Estimated cost this search

\$0.05 Estimated total session cost 0.155 DialUnits

SYSTEM:OS - DIALOG OneSearch

File 5: Biosis Previews(R) 1969-2004/May W4
(c) 2004 BIOSIS

File 6: NTIS 1964-2004/May W4
(c) 2004 NTIS, Intl Cpyrght All Rights Res

File 34: SciSearch(R) Cited Ref Sci 1990-2004/May W4
(c) 2004 Inst for Sci Info

File 40: Enviroline(R) 1975-2004/Apr

File 50: CAB Abstracts 1972-2004/Apr
(c) 2004 CAB International

File 65: Inside Conferences 1993-2004/May W4
(c) 2004 BLDSC all rts. reserv.

File 71: ELSEVIER BIOBASE 1994-2004/May W3
(c) 2004 Elsevier Science B.V.

File 73: EMBASE 1974-2004/May W4
(c) 2004 Elsevier Science B.V.

File 94: JICST-EPlus 1985-2004/May W1
(c) 2004 Japan Science and Tech Corp(JST)

File 98: General Sci Abs/Full-Text 1984-2004/May
(c) 2004 The HW Wilson Co.

File 103: Energy SciTec 1974-2004/May B1
(c) 2004 Contains copyrighted material

***File 103: For access restrictions see Help Restrict.**

File 143: Biol. & Agric. Index 1983-2004/Apr
(c) 2004 The HW Wilson Co

File 144: Pascal 1973-2004/May W3
(c) 2004 INIST/CNRS

File 155: MEDLINE(R) 1966-2004/May W4
(c) format only 2004 The Dialog Corp.

***File 155: Medline has been reloaded. Accession numbers**
have changed. Please see HELP NEWS 154 for details.

File 156: ToxFile 1965-2004/May W2
(c) format only 2004 The Dialog Corporation

***File 156: ToxFile now reloaded with 2004 MeSH.**
Enter Help News156 for more information.

File 162: Global Health 1983-2004/Apr
(c) 2004 CAB International

File 172: EMBASE Alert 2004/May W3
(c) 2004 Elsevier Science B.V.

File 305: Analytical Abstracts 1980-2004/May W3
(c) 2004 Royal Soc Chemistry

***File 305: Alert feature enhanced for multiple files, duplicate**
removal, customized scheduling. See HELP ALERT.

File 369: New Scientist 1994-2004/May W3
(c) 2004 Reed Business Information Ltd.

File 370: Science 1996-1999/Jul W3
(c) 1999 AAAS

***File 370: This file is closed (no updates). Use File 47 for more current**
information.

File 399: CA SEARCH(R) 1967-2004/UD=14022
(c) 2004 American Chemical Society

***File 399: Use is subject to the terms of your user/customer agreement.**
Alert feature enhanced for multiple files, etc. See HELP ALERT.

File 434: SciSearch(R) Cited Ref Sci 1974-1989/Dec
(c) 1998 Inst for Sci Info

File 8: Ei Compendex(R) 1970-2004/May W3
(c) 2004 Elsevier Eng. Info. Inc.

File 99: Wilson Appl. Sci & Tech Abs 1983-2004/Apr
(c) 2004 The HW Wilson Co.

File 135:NewsRx Weekly Reports 1995-2004/May W3
(c) 2004 NewsRx

***File 135: New newsletters are now added. See Help News135 for the complete list of newsletters.**

File 266:FEDRIP 2004/Mar

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File 315:ChemEng & Biotec Abs 1970-2004/Apr

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File 357:Derwent Biotech Res. 1982-2004/May W4

(c) 2004 Thomson Derwent & ISI

File 358:Current BioTech Abs 1983-2004/Apr

(c) 2004 DECHEMA

Set	Items	Description
---	-----	-----
? s	P2X(2)	receptor
S1	0	P2X(2)RECEPTOR
? s	P()2()X (n2)	receptor
Processing		
Processing		
Processed	10 of 29 files	...
Processing		
Processed	20 of 29 files	...
Processing		
Completed processing all files		
	8551901	P
	24271847	2
	5061576	X
	3785095	RECEPTOR
S2	10	P()2()X (N2) RECEPTOR
? s	p2X (n2)	receptor
	10179	P2X
	3785095	RECEPTOR
S3	5539	P2X (N2)RECEPTOR
? s	"p2x" (n2)	receptor
	10179	P2X
	3785095	RECEPTOR
S4	5539	"P2X" (N2) RECEPTOR
? s	p2X4 (n2)	receptor
	714	P2X4
	3785095	RECEPTOR
S5	277	P2X4 (N2) RECEPTOR
? s	s3 (n2)	antagonist
	5539	S3
	841251	ANTAGONIST
S6	383	S3 (N2) ANTAGONIST
? s	s4 (n2)	antagonist
	5539	S4
	841251	ANTAGONIST
S7	383	S4 (N2)ANTAGONIST
? ds		

Set	Items	Description
S1	0	P2X(2)RECEPTOR
S2	10	P()2()X (N2) RECEPTOR
S3	5539	P2X (N2)RECEPTOR
S4	5539	"P2X" (N2) RECEPTOR
S5	277	P2X4 (N2) RECEPTOR
S6	383	S3 (N2) ANTAGONIST
S7	383	S4 (N2)ANTAGONIST
? s	s3 (n2)	agonist

5539 S3
 542915 AGONIST
 S8 390 S3 (N2) AGONIST
 ? s s4(n2)agonist
 5539 S4
 542915 AGONIST
 S9 390 S4(N2)AGONIST
 ? ds

Set	Items	Description
S1	0	P2X(2)RECEPTOR
S2	10	P()2()X (N2) RECEPTOR
S3	5539	P2X (N2)RECEPTOR
S4	5539	"P2X" (N2) RECEPTOR
S5	277	P2X4 (N2) RECEPTOR
S6	383	S3 (N2) ANTAGONIST
S7	383	S4 (N2)ANTAGONIST
S8	390	S3 (N2) AGONIST
S9	390	S4(N2)AGONIST

? s s5 (n2) antagonist
 277 S5
 841251 ANTAGONIST
 S10 2 S5 (N2) ANTAGONIST
 ? s s5 (N2)agonist
 277 S5
 542915 AGONIST
 S11 15 S5 (N2)AGONIST

? s s10(n5)inhibit?

Processing

Processed 10 of 29 files ...

Completed processing all files

2 S10
 6944746 INHIBIT?
 S12 1 S10(N5)INHIBIT?

? s s11(n5)inhibit?

Processing

Processed 20 of 29 files ...

Completed processing all files

15 S11
 6944746 INHIBIT?
 S13 0 S11(N5)INHIBIT?

? t s12/3,k/

>>>KWIC option is not available in file(s): 399

12/3,K/1 (Item 1 from file: 5)

DIALOG(R)File 5:Biosis Previews(R)

(c) 2004 BIOSIS. All rts. reserv.

0013366531 BIOSIS NO.: 200100538370

Mutation of histidine 241 of the rat P2X4 receptor alters agonist and antagonist sensitivities

AUTHOR: Xiong K (Reprint); Li C (Reprint); Stewart R R (Reprint); Weight F F (Reprint)

AUTHOR ADDRESS: Laboratory of Molecular and Cellular Neurobiology, NIAAA, NIH, Rockville, MD, USA**USA

JOURNAL: Society for Neuroscience Abstracts 27 (2): p1571 2001 2001

MEDIUM: print

CONFERENCE/MEETING: 31st Annual Meeting of the Society for Neuroscience

San Diego, California, USA November 10-15, 2001; 20011110

ISSN: 0190-5295

DOCUMENT TYPE: Meeting; Meeting Abstract

RECORD TYPE: Abstract
LANGUAGE: English

...ABSTRACT: 55 muM). In addition, the mutation of histidine 241 induced a sensitivity of the rat **P2X4 receptor** to the **antagonist**, PPADS: 100 muM PPADS **inhibited** 50 muM ATP-activated current by 5% in the wildtype and by 95% in the...

? ds

Set	Items	Description
S1	0	P2X(2)RECEPTOR
S2	10	P()2()X (N2) RECEPTOR
S3	5539	P2X (N2)RECEPTOR
S4	5539	"P2X" (N2) RECEPTOR
S5	277	P2X4 (N2) RECEPTOR
S6	383	S3 (N2) ANTAGONIST
S7	383	S4 (N2)ANTAGONIST
S8	390	S3 (N2) AGONIST
S9	390	S4(N2)AGONIST
S10	2	S5 (N2) ANTAGONIST
S11	15	S5 (N2)AGONIST
S12	1	S10(N5)INHIBIT?
S13	0	S11(N5)INHIBIT?

? t s10/3,k/all

>>>KWIC option is not available in file(s): 399

10/3,K/1 (Item 1 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)
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0013366531 BIOSIS NO.: 200100538370

Mutation of histidine 241 of the rat P2X4 receptor alters agonist and antagonist sensitivities

AUTHOR: Xiong K (Reprint); Li C (Reprint); Stewart R R (Reprint); Weight F F (Reprint)

AUTHOR ADDRESS: Laboratory of Molecular and Cellular Neurobiology, NIAAA, NIH, Rockville, MD, USA**USA

JOURNAL: Society for Neuroscience Abstracts 27 (2): p1571 2001 2001

MEDIUM: print

CONFERENCE/MEETING: 31st Annual Meeting of the Society for Neuroscience San Diego, California, USA November 10-15, 2001; 20011110

ISSN: 0190-5295

DOCUMENT TYPE: Meeting; Meeting Abstract

RECORD TYPE: Abstract

LANGUAGE: English

...ABSTRACT: 55 muM). In addition, the mutation of histidine 241 induced a sensitivity of the rat **P2X4 receptor** to the **antagonist**, PPADS: 100 muM PPADS **inhibited** 50 muM ATP-activated current by 5% in the wildtype...

10/3,K/2 (Item 1 from file: 399)
DIALOG(R)File 399:CA SEARCH(R)
(c) 2004 American Chemical Society. All rts. reserv.

139317806 CA: 139(21)317806j JOURNAL
Up-regulation of P2X2, P2X4 receptor and ischemic cell death: prevention by P2 antagonists

AUTHOR(S): Cavaliere, F.; Florenzano, F.; Amadio, S.; Fusco, F. R.; Viscomi, M. T.; D'Ambrosi, N.; Vacca, F.; Sancesario, G.; Bernardi, G.;

look into.

Molinari, M.; Volonte, C.

LOCATION: IRCCS Santa Lucia Foundation, Rome, Italy
JOURNAL: Neuroscience (Oxford, U. K.) (Neuroscience (Oxford, United Kingdom))
DATE: 2003 VOLUME: 120 NUMBER: 1 PAGES: 85-98 CODEN: NRSCDN
ISSN: 0306-4522 PUBLISHER ITEM IDENTIFIER: 0306-4522(03)00228-8
LANGUAGE: English PUBLISHER: Elsevier Science Ltd.

? t s11/3,k/all

>>>KWIC option is not available in file(s): 399

11/3,K/1 (Item 1 from file: 5)

DIALOG(R)File 5:Biosis Previews(R)

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0014336193 BIOSIS NO.: 200300294012

MUTATION OF HISTIDINES IN THE RAT P2X4 RECEPTOR ALTERS AGONIST

POTENCY: GATING VERSUS BINDING.

AUTHOR: Xiong K (Reprint); Stewart R R (Reprint); Hu X Q (Reprint); Werby E (Reprint); Weight F F (Reprint); Li C (Reprint)

AUTHOR ADDRESS: Laboratory of Molecular and Cellular Neurobiology, NIAAA, NIH, Bethesda, MD, USA**USA

JOURNAL: Society for Neuroscience Abstract Viewer and Itinerary Planner
2002 pAbstract No. 337.4 2002 2002

MEDIUM: cd-rom

CONFERENCE/MEETING: 32nd Annual Meeting of the Society for Neuroscience
Orlando, Florida, USA November 02-07, 2002; 20021102

SPONSOR: Society for Neuroscience

DOCUMENT TYPE: Meeting; Meeting Poster; Meeting Abstract

RECORD TYPE: Abstract

LANGUAGE: English

MUTATION OF HISTIDINES IN THE RAT P2X4 RECEPTOR ALTERS AGONIST

POTENCY: GATING VERSUS BINDING.

...ABSTRACT: investigated the possibility that the three histidine residues in the extracellular loop of the rat **P2X4 receptor** regulate **agonist** potency. Mutation of histidine 241 to alanine (H241A) decreased the EC50 value of the ATP...

...competitive ATP binding curves were similar. These results suggest that histidine 241 of the rat **P2X4 receptor** regulates **agonist** potency by altering receptor gating rather than agonist binding.)K.X. and R.R.S...

11/3,K/2 (Item 2 from file: 5)

DIALOG(R)File 5:Biosis Previews(R)

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0014141199 BIOSIS NO.: 200300099918

Multiple purinergic receptors lead to intracellular calcium increases in cultured rat Sertoli cells.

AUTHOR: Ko W H (Reprint); Au C L; Yip C Y

AUTHOR ADDRESS: Department of Physiology, Faculty of Medicine, Chinese University of Hong Kong, Shatin, Basic Medical Sciences Building, Hong Kong, China**China

AUTHOR E-MAIL ADDRESS: whko@cuhk.edu.hk

JOURNAL: Life Sciences 72 (13): p1519-1535 February 14, 2003 2003

MEDIUM: print

ISSN: 0024-3205 (ISSN print)

DOCUMENT TYPE: Article

RECORD TYPE: Abstract

LANGUAGE: English

...ABSTRACT: one additional receptor population that allowed nucleotides to increase (Ca²⁺)_i. Apart from the P2Y **receptor** agonists, the **P2X4** and **P2X7 agonist**, 2' and 3'-O-(4-benzoylbenzoyl)-ATP (Bz-ATP), also evoked (Ca²⁺)_i increases in...

11/3,K/3 (Item 3 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)
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0013790313 BIOSIS NO.: 200200383824

P2X purinergic receptor channel expression and function in bovine aortic endothelium

AUTHOR: Ramirez Angelina N (Reprint); Kunze Diana L

AUTHOR ADDRESS: MetroHealth Systems, 2500 MetroHealth Drive, Rammelkamp Center R334, Cleveland, OH, 44109-1998, USA**USA

~~XXXX~~ JOURNAL: American Journal of Physiology 282 (6 Part 2): pH2106-H2116 June, 2002 2002

MEDIUM: print

ISSN: 0002-9513

DOCUMENT TYPE: Article

RECORD TYPE: Abstract

LANGUAGE: English

...ABSTRACT: whole cell and outside-out patch recordings using 2-methyl-thio-ATP (MeSATP) as a **P2X4** and **P2X5 receptor agonist** and 2',3'-O-(4-benzoylbenzoyl)ATP (BzATP) as a **P2X7 receptor agonist**. MeSATP (10...

11/3,K/4 (Item 4 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)
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0013366531 BIOSIS NO.: 200100538370

Mutation of histidine 241 of the rat P2X4 receptor alters agonist and antagonist sensitivities

AUTHOR: Xiong K (Reprint); Li C (Reprint); Stewart R R (Reprint); Weight F F (Reprint)

AUTHOR ADDRESS: Laboratory of Molecular and Cellular Neurobiology, NIAAA, NIH, Rockville, MD, USA**USA

JOURNAL: Society for Neuroscience Abstracts 27 (2): p1571 2001 2001

MEDIUM: print

CONFERENCE/MEETING: 31st Annual Meeting of the Society for Neuroscience San Diego, California, USA November 10-15, 2001; 20011110

ISSN: 0190-5295

DOCUMENT TYPE: Meeting; Meeting Abstract

RECORD TYPE: Abstract

LANGUAGE: English

Mutation of histidine 241 of the rat P2X4 receptor alters agonist and antagonist sensitivities

11/3,K/5 (Item 5 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)
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0013092289 BIOSIS NO.: 200100264128

P2X receptors in bovine aortic endothelium

AUTHOR: Ramirez Angelina N (Reprint); Kunze Diana L (Reprint)

AUTHOR ADDRESS: Rammelkamp Center, MetroHealth, Case Western Reserve University, 2500 MetroHealth Drive, Cleveland, OH, 44109, USA**USA

JOURNAL: FASEB Journal 15 (4): pA109 March 7, 2001 2001

MEDIUM: print

CONFERENCE/MEETING: Annual Meeting of the Federation of American Societies for Experimental Biology on Experimental Biology 2001 Orlando, Florida, USA March 31-April 04, 2001; 20010331

ISSN: 0892-6638

DOCUMENT TYPE: Meeting; Meeting Abstract

RECORD TYPE: Abstract

LANGUAGE: English

...ABSTRACT: electrophysiological effect of ligand activation of these P2X receptors we used ATP, 2Me-S-ATP (**P2X4** and P2X5 **receptor agonist**) and Bz-ATP (P2X7 receptor agonist) to characterize the channels using whole cell and outside...

11/3,K/6 (Item 6 from file: 5)

DIALOG(R)File 5: Biosis Previews(R)

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0012472736 BIOSIS NO.: 200000191049

Mutation of histidine 286 of the human P2X4 purinoceptor removes extracellular pH sensitivity

AUTHOR: Clarke C E; Benham C D (Reprint); Bridges A; George A R; Meadows H J

AUTHOR ADDRESS: Department of Neuroscience, SmithKline Beecham Pharmaceuticals, Third Avenue, Harlow, New Frontiers Science Park, Essex, CM19 5AW, UK**UK

JOURNAL: Journal of Physiology (Cambridge) 523 (3): p697-703 march 15, 2000 2000

MEDIUM: print

ISSN: 0022-3751

DOCUMENT TYPE: Article

RECORD TYPE: Abstract

LANGUAGE: English

...ABSTRACT: directed mutagenesis of histidine 286 (H286) to alanine completely abolished the pH sensitivity of the **P2X4 receptor** at all **agonist** concentrations. ATP potency showed a small (fourfold) leftward shift. Mutagenesis of the other three histidines...

11/3,K/7 (Item 1 from file: 34)

DIALOG(R)File 34: SciSearch(R) Cited Ref Sci

(c) 2004 Inst for Sci Info. All rts. reserv.

10627774 Genuine Article#: 550YC No. References: 42

Title: P2X purinergic receptor channel expression and function in bovine aortic endothelium

Author(s): Ramirez AN (REPRINT) ; Kunze DL

Corporate Source: Metrohlth Syst, Rammelkamp Ctr R334, 2500 Metrohlth Dr/Cleveland//OH/44109 (REPRINT); Metrohlth Syst, Rammelkamp Ctr Educ & Res, Cleveland//OH/44109; Case Western Reserve Univ, Dept Neurosci, Cleveland//OH/44109

Journal: AMERICAN JOURNAL OF PHYSIOLOGY-HEART AND CIRCULATORY PHYSIOLOGY,

2002, V282, N6 (JUN), PH2106-H2116
ISSN: 0363-6135 Publication date: 20020600
Publisher: AMER PHYSIOLOGICAL SOC, 9650 ROCKVILLE PIKE, BETHESDA, MD 20814
USA
Language: English Document Type: ARTICLE (ABSTRACT AVAILABLE)

...Abstract: whole cell and outside-out patch recordings using
2-methyl-thio-ATP (MeSATP) as a **P2X4** and P2X5 **receptor agonist**
and 2',3'-O-(4-benzoylbenzoyl)ATP (BzATP) as a P2X7 receptor agonist.
MeSATP (10...

11/3,K/8 (Item 1 from file: 50)
DIALOG(R)File 50:CAB Abstracts
(c) 2004 CAB International. All rts. reserv.

04392110 CAB Accession Number: 20033016414

Multiple purinergic receptors lead to intracellular calcium increases in cultured rat Sertoli cells.

Ko, W. H.; Au, C. L.; Yip, C. Y.
Department of Physiology, Faculty of Medicine, The Chinese University of
Hong Kong, Basic Medical Sciences Building, Shatin, Hong Kong, China.

~~Life Sciences vol. 72 (13): p.1519-1535~~

Publication Year: 2003

ISSN: 0024-3205 --

Language: English

Document Type: Journal article

--

... one additional receptor population that allowed nucleotides to
increase (Ca²⁺)_i. Apart from the P2Y **receptor** agonists, the **P2X4** and
P2X7 **agonist**, 2' and 3'-O-(4-benzoylbenzoyl)-ATP (Bz-ATP), also evoked
(Ca²⁺)_i increases in...

11/3,K/9 (Item 1 from file: 71)
DIALOG(R)File 71:ELSEVIER BIOBASE
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02061326 2002141757

P2X purinergic receptor channel expression and function in bovine aortic endothelium

Ramirez A.N.; Kunze D.L.

ADDRESS: A.N. Ramirez, Rammelkamp Center R334, MetroHealth Systems, 2500
MetroHealth Drive, Cleveland, OH 44109-1998, United States

EMAIL: arnavarro@metrohealth.org

Journal: American Journal of Physiology - Heart and Circulatory Physiology
, 282/6 51-6 (H2106-H2116), 2002, United States

CODEN: AJPPD

ISSN: 0363-6135

DOCUMENT TYPE: Article

LANGUAGES: English SUMMARY LANGUAGES: English

NO. OF REFERENCES: 42

...whole cell and outside-out patch recordings using 2-methyl-thio-ATP
(MeSATP) as a **P2X4** and P2X5 **receptor agonist** and
2prime,3prime-O-(4-benzoylbenzoyl)ATP (BzATP) as a P2X7 receptor agonist.
MeSATP (10...

11/3,K/10 (Item 1 from file: 73)
DIALOG(R)File 73:EMBASE
(c) 2004 Elsevier Science B.V. All rts. reserv.

11650245 EMBASE No: 2002220993

P2X purinergic receptor channel expression and function in bovine aortic endothelium

Ramirez A.N.; Kunze D.L.
A.N. Ramirez, Rammelkamp Center R334, MetroHealth Systems, 2500
MetroHealth Drive, Cleveland, OH 44109-1998 United States
AUTHOR EMAIL: arnavarro@metrohealth.org
American Journal of Physiology - Heart and Circulatory Physiology (AM.
J. PHYSIOL. HEART CIRC. PHYSIOL.) (United States) 2002, 282/6 51-6
(H2106-H2116)
CODEN: AJPPD ISSN: 0363-6135
DOCUMENT TYPE: Journal ; Article
LANGUAGE: ENGLISH SUMMARY LANGUAGE: ENGLISH
NUMBER OF REFERENCES: 42

...whole cell and outside-out patch recordings using 2-methyl-thio-ATP
(MeSATP) as a **P2X4** and P2X5 **receptor agonist** and
2prime,3prime-O-(4-benzoylbenzoyl)ATP (BzATP) as a P2X7 receptor agonist.
MeSATP (10...

11/3,K/11 (Item 1 from file: 98)
DIALOG(R)File 98:General Sci Abs/Full-Text
(c) 2004 The HW Wilson Co. All rts. reserv.

04873124 H.W. WILSON RECORD NUMBER: BGSA02123124

P2X purinergic receptor channel expression and function in bovine aortic endothelium.

Ramirez, Angelina
Kunze, Diana L
American Journal of Physiology (Am J Physiol) v. 282 no6 (June 2002 pt2) p.
H2106-H2116
SPECIAL FEATURES: bibl graph il ISSN: 0002-9513
LANGUAGE: English
COUNTRY OF PUBLICATION: United States

...ABSTRACT: whole cell and outside-out patch recordings using
2-methyl-thio-ATP (MeSATP) as a **P2X4** and P2X5 **receptor agonist** and
2',3'-O-(4-benzoylbenzoyl)ATP (BzATP) as a P2X7 receptor agonist. MeSATP
(10...

11/3,K/12 (Item 1 from file: 144)
DIALOG(R)File 144:Pascal
(c) 2004 INIST/CNRS. All rts. reserv.

15708491 PASCAL No.: 02-0417633

P2X purinergic receptor channel expression and function in bovine aortic endothelium

RAMIREZ Angelina N; KUNZE Diana L
Rammelkamp Center for Education and Research, MetroHealth Systems and
Department of Neurosciences, Case Western Reserve University, Cleveland,
Ohio 44109-1998, United States
Journal: American journal of physiology. Heart and circulatory physiology
, 2002, 51 (6) H2106-H2116
Language: English

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... whole cell and outside-out patch recordings using 2-methyl-thio-ATP (MeSATP) as a **P2X4** and **P2X5** **receptor** **agonist** and 2',3'-O-(4-benzoylbenzoyl)ATP (BzATP) as a P2X7 receptor agonist. MeSATP (10...

11/3,K/13 (Item 1 from file: 155)

DIALOG(R) File 155:MEDLINE(R)

(c) format only 2004 The Dialog Corp. All rts. reserv.

11814707 PMID: 12003818

P2X purinergic receptor channel expression and function in bovine aortic endothelium.

Ramirez Angelina N; Kunze Diana L

Rammelkamp Center for Education and Research, MetroHealth Systems and Department of Neurosciences, Case Western Reserve University, Cleveland, Ohio 44109-1998, USA. arnavarro@metrohealth.org

American journal of physiology. Heart and circulatory physiology (United States) Jun 2002, 282 (6) pH2106-16, ISSN 0363-6135 Journal Code: 100901228

Contract/Grant No.: HL-61436; HL; NHLBI

Document type: Journal Article

Languages: ENGLISH

Main Citation Owner: NLM

Record type: Completed

... whole cell and outside-out patch recordings using 2-methyl-thio-ATP (MeSATP) as a **P2X4** and **P2X5** **receptor** **agonist** and 2',3'-O-(4-benzoylbenzoyl)ATP (BzATP) as a P2X7 receptor agonist. MeSATP (10...

11/3,K/14 (Item 2 from file: 155)

DIALOG(R) File 155:MEDLINE(R)

(c) format only 2004 The Dialog Corp. All rts. reserv.

10612714 PMID: 10718748

Mutation of histidine 286 of the human P2X4 purinoceptor removes extracellular pH sensitivity.

Clarke C E; Benham C D; Bridges A; George A R; Meadows H J

Departments of Neuroscience, Biotechnology and Genetics and Medicinal Chemistry Research, SmithKline Beecham Pharmaceuticals, New Frontiers Science Park, Third Avenue, Harlow, Essex CM19 5AW, UK.

Journal of physiology (ENGLAND) Mar 15 2000, 523 Pt 3 p697-703,

ISSN 0022-3751 Journal Code: 0266262

Document type: Journal Article

Languages: ENGLISH

Main Citation Owner: NLM

Record type: Completed

... directed mutagenesis of histidine 286 (H286) to alanine completely abolished the pH sensitivity of the **P2X4** **receptor** at all **agonist** concentrations. ATP potency showed a small (fourfold) leftward shift. Mutagenesis of the other three histidines...

11/3,K/15 (Item 1 from file: 156)

DIALOG(R)File 156:ToxFile

(c) format only 2004 The Dialog Corporation. All rts. reserv.

03114447 NLM Doc No: 10718748

Mutation of histidine 286 of the human P2X4 purinoceptor removes extracellular pH sensitivity.

Clarke C E; Benham C D; Bridges A; George A R; Meadows H J

Departments of Neuroscience, Biotechnology and Genetics and Medicinal Chemistry Research, SmithKline Beecham Pharmaceuticals, New Frontiers Science Park, Third Avenue, Harlow, Essex CM19 5AW, UK.

Journal Name: Journal of physiology (ENGLAND) Pub. Year: Mar 15 2000
523 Pt 3 p697-703, ISSN: 0022-3751 Journal Code: 0266262

Document type: Journal Article

Languages: ENGLISH

Main Citation Owner: NLM

Record type: Completed

... directed mutagenesis of histidine 286 (H286) to alanine completely abolished the pH sensitivity of the **P2X4 receptor** at all **agonist** concentrations. ATP potency showed a small (fourfold) leftward shift. Mutagenesis of the other three histidines...

? ds

Set	Items	Description
S1	0	P2X(2)RECEPTOR
S2	10	P()2()X (N2) RECEPTOR
S3	5539	P2X (N2)RECEPTOR
S4	5539	"P2X" (N2) RECEPTOR
S5	277	P2X4 (N2) RECEPTOR
S6	383	S3 (N2) ANTAGONIST
S7	383	S4 (N2)ANTAGONIST
S8	390	S3 (N2) AGONIST
S9	390	S4 (N2)AGONIST
S10	2	S5 (N2) ANTAGONIST
S11	15	S5 (N2)AGONIST
S12	1	S10 (N5)INHIBIT?
S13	0	S11 (N5)INHIBIT?

? neuropathic (n2)pain

>>>Unrecognizable Command

? s neuropathic(n2)pain

32882 NEUROPATHIC

1035947 PAIN

S14 19158 NEUROPATHIC (N2) PAIN

? s tactile(n2)allodynia

46026 TACTILE

11269 ALLODYNIA

S15 1570 TACTILE (N2) ALLODYNIA

? s s14 and s15

19158 S14

1570 S15

S16 932 S14 AND S15

? rd

...examined 50 records (50)

...examined 50 records (100)

...examined 50 records (150)

...examined 50 records (200)

...examined 50 records (250)

...examined 50 records (300)

...examined 50 records (350)

...examined 50 records (400)

...examined 50 records (450)

...examined 50 records (500)
 ...examined 50 records (550)
 ...examined 50 records (600)
 ...examined 50 records (650)
 ...examined 50 records (700)
 ...examined 50 records (750)
 ...examined 50 records (800)
 ...examined 50 records (850)
 ...examined 50 records (900)
 >>>Record 266:227263 ignored; incomplete bibliographic data, not retained -
 in RD set
 >>>Record 266:215055 ignored; incomplete bibliographic data, not retained -
 in RD set
 ...completed examining records
 S17 344 RD (unique items)
 ? ds

Set	Items	Description
S1	0	P2X(2)RECEPTOR
S2	10	P()2()X (N2) RECEPTOR
S3	5539	P2X (N2)RECEPTOR
S4	5539	"P2X" (N2) RECEPTOR
S5	277	P2X4 (N2) RECEPTOR
S6	383	S3 (N2) ANTAGONIST
S7	383	S4 (N2)ANTAGONIST
S8	390	S3 (N2) AGONIST
S9	390	S4 (N2)AGONIST
S10	2	S5 (N2) ANTAGONIST
S11	15	S5 (N2)AGONIST
S12	1	S10(N5)INHIBIT?
S13	0	S11(N5)INHIBIT?
S14	19158	NEUROPATHIC(N2)PAIN
S15	1570	TACTILE(N2)ALLODYNIA
S16	932	S14 AND S15
S17	344	RD (unique items)

? s s17 and s5
 344 S17
 277 S5
 S18 2 S17 AND S5
 ? t/3,k/all
 >>>KWIC option is not available in file(s): 399

18/3,K/1 (Item 1 from file: 5)
 DIALOG(R)File 5:Biosis Previews(R)
 (c) 2004 BIOSIS. All rts. reserv.

0014864183 BIOSIS NO.: 200400233892
Up-regulation of microglial P2X4 receptor expression by retinoic acid.
 AUTHOR: Tozaki Hidetoshi (Reprint); Koizumi Shuichi; Inoue Kazuhide
 (Reprint)
 AUTHOR ADDRESS: Div. Biosignal, Div. Pharmacol., Natl. Inst. Hlth. Sci.,
 Tokyo, 158-8501, Japan**Japan
 JOURNAL: Journal of Pharmacological Sciences 94 (Supplement 1): p299P 2004
 2004
 MEDIUM: print
 CONFERENCE/MEETING: 77th Annual Meeting of the Japanese Pharmacological
 Society Osaka, Japan March 08-10, 2004; 20040308
 SPONSOR: Japanese Pharmacological Society
 ISSN: 1347-8613 (ISSN print)
 DOCUMENT TYPE: Meeting; Meeting Abstract
 RECORD TYPE: Citation

LANGUAGE: English

Up-regulation of microglial P2X4 receptor expression by retinoic acid.

DESCRIPTORS:

...DISEASES: neuropathic pain --...
... tactile allodynia --

18/3,K/2 (Item 2 from file: 5)

DIALOG(R)File 5:Biosis Previews(R)

(c) 2004 BIOSIS. All rts. reserv.

0014790941 BIOSIS NO.: 200400171698

ATP- and adenosine-mediated signaling in the central nervous system:

Chronic pain and microglia: Involvement of the ATP receptor P2X4 .

AUTHOR: Inoue Kazuhide (Reprint); Tsuda Makoto; Koizumi Schuichi

AUTHOR ADDRESS: Division of Biosignaling, National Institute of Health Sciences, 1-18-1 Kamiyoga, Setagaya-ku, Tokyo, 158-8501, Japan**Japan

AUTHOR E-MAIL ADDRESS: inoue@nihs.go.jp

~~JOURNAL: Journal of Pharmacological Sciences 94 (2): pp112-114 February 2004~~

MEDIUM: print

ISSN: 1347-8613 (ISSN print)

DOCUMENT TYPE: Article

RECORD TYPE: Abstract

LANGUAGE: English

...mediated signaling in the central nervous system: Chronic pain and microglia: Involvement of the ATP receptor P2X4 .

...ABSTRACT: reported that activation of P2X2/3 heteromeric channel/receptor in primary sensory neurons causes acutely tactile allodynia , one hallmark of neuropathic pain . We report here that tactile allodynia under the chronic pain state requires an activation of the P2X4 ionotropic ATP receptor and p38 mitogen-activated protein kinase (MAPK) in spinal cord microglia. Two weeks after L5...

...results demonstrate that activation of P2X4 or p38MAPK in spinal cord microglia is necessary for tactile allodynia after nerve injury.

DESCRIPTORS:

MISCELLANEOUS TERMS: tactile allodynia
? ds

Set	Items	Description
S1	0	P2X(2)RECEPTOR
S2	10	P()2()X (N2) RECEPTOR
S3	5539	P2X (N2)RECEPTOR
S4	5539	"P2X" (N2) RECEPTOR
S5	277	P2X4 (N2) RECEPTOR
S6	383	S3 (N2) ANTAGONIST
S7	383	S4 (N2)ANTAGONIST
S8	390	S3 (N2) AGONIST
S9	390	S4 (N2)AGONIST
S10	2	S5 (N2) ANTAGONIST
S11	15	S5 (N2)AGONIST
S12	1	S10 (N5)INHIBIT?
S13	0	S11 (N5)INHIBIT?
S14	19158	NEUROPATHIC (N2) PAIN
S15	1570	TACTILE (N2)ALLODYNIA
S16	932	S14 AND S15

S17 344 RD (unique items)
 S18 2 S17 AND S5
 ? s 17 and s4
 2491709 17
 5539 S4
 S19 148 17 AND S4
 ? rd
 ...examined 50 records (50)
 ...examined 50 records (100)
 ...completed examining records
 S20 76 RD (unique items)
 ? s s17 and s4
 344 S17
 5539 S4
 S21 5 S17 AND S4
 ? rd
 ...completed examining records
 S22 5 RD (unique items)
 ? t/3,k/all
 >>>KWIC option is not available in file(s): 399

22/3,K/1 (Item 1 from file: 5)
 DIALOG(R)File 5:Biosis Previews(R)
 (c) 2004 BIOSIS. All rts. reserv.

0014864183 BIOSIS NO.: 200400233892
Up-regulation of microglial P2X4 receptor expression by retinoic acid.
 AUTHOR: Tozaki Hidetoshi (Reprint); Koizumi Shuichi; Inoue Kazuhide
 (Reprint)
 AUTHOR ADDRESS: Div. Biosignal, Div. Pharmacol., Natl. Inst. Hlth. Sci.,
 Tokyo, 158-8501, Japan**Japan
 JOURNAL: Journal of Pharmacological Sciences 94 (Supplement 1): p299P 2004
 2004
 MEDIUM: print
 CONFERENCE/MEETING: 77th Annual Meeting of the Japanese Pharmacological
 Society Osaka, Japan March 08-10, 2004; 20040308
 SPONSOR: Japanese Pharmacological Society
 ISSN: 1347-8613 (ISSN print)
 DOCUMENT TYPE: Meeting; Meeting Abstract
 RECORD TYPE: Citation
 LANGUAGE: English

DESCRIPTORS:
 ...DISEASES: **neuropathic pain** --...
 ... **tactile allodynia** --
 CHEMICALS & BIOCHEMICALS: ... **P2X -4 receptor** --

22/3,K/2 (Item 2 from file: 5)
 DIALOG(R)File 5:Biosis Previews(R)
 (c) 2004 BIOSIS. All rts. reserv.

0014790941 BIOSIS NO.: 200400171698
ATP- and adenosine-mediated signaling in the central nervous system:
Chronic pain and microglia: Involvement of the ATP receptor P2X4.
 AUTHOR: Inoue Kazuhide (Reprint); Tsuda Makoto; Koizumi Shuichi
 AUTHOR ADDRESS: Division of Biosignaling, National Institute of Health
 Sciences, 1-18-1 Kamiyoga, Setagaya-ku, Tokyo, 158-8501, Japan**Japan
 AUTHOR E-MAIL ADDRESS: inoue@nihs.go.jp
 JOURNAL: Journal of Pharmacological Sciences 94 (2): p112-114 February

2004 2004
MEDIUM: print
ISSN: 1347-8613 (ISSN print)
DOCUMENT TYPE: Article
RECORD TYPE: Abstract
LANGUAGE: English

...ABSTRACT: reported that activation of P2X2/3 heteromeric channel/receptor in primary sensory neurons causes acutely **tactile allodynia**, one hallmark of **neuropathic pain**. We report here that **tactile allodynia** under the chronic pain state requires an activation of the P2X4 ionotropic ATP receptor and...

...results demonstrate that activation of P2X4 or p38MAPK in spinal cord microglia is necessary for **tactile allodynia** after nerve injury.

DESCRIPTORS:

CHEMICALS & BIOCHEMICALS: ... **P2X -4 receptor** --

MISCELLANEOUS TERMS: **tactile allodynia**

22/3,K/3 (Item 3 from file: 5)

DIALOG(R)File 5:Biosis Previews(R)

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0014723989 BIOSIS NO.: 200400092758

Effects of A-317491, a novel and selective P2X3/P2X2/3 receptor antagonist, on neuropathic, inflammatory and chemogenic nociception following intrathecal and intraplantar administration.

AUTHOR: McGaraughty Steve (Reprint); Wismer Carol T; Zhu Chang Z; Mikusa Joseph; Honore Prisca; Chu Katharine L; Lee Chih-Hung; Faltynek Connie R; Jarvis Michael F

AUTHOR ADDRESS: Neuroscience Research, Global Pharmaceutical Research and Development, Abbott Laboratories, 100 Abbott Park Road, R4PM, AP9-1, Abbott Park, IL, 60064-6118, USA**USA

AUTHOR E-MAIL ADDRESS: Steve.P.Mcgaraughty@abbott.com

JOURNAL: British Journal of Pharmacology 140 (8): p1381-1388 December 2003
2003

MEDIUM: print
ISSN: 0007-1188 (ISSN print)
DOCUMENT TYPE: Article
RECORD TYPE: Abstract
LANGUAGE: English

...ABSTRACT: homomeric and P2X2/3 heteromeric channels, is antinociceptive in rat models of chronic inflammatory and **neuropathic pain**. In an effort to further evaluate the role of P2X3/P2X2/3 receptors in nociceptive...

...formalin assay (intrathecal ED50 = 10 nmol, intraplantar ED50 > 300 nmol). Nocifensive behaviors induced by the **P2X receptor** agonist alpha,beta-meATP were also significantly reduced by intraplantar injection of A-317491. 5...

...Intrathecal administration of **A-317491** appears to be more effective than intraplantar administration to reduce **tactile allodynia** following peripheral nerve injury.

DESCRIPTORS:

...DISEASES: **neuropathic pain** --

CHEMICALS & BIOCHEMICALS: ... **P2X -2/3 receptor** ; ...

... **P2X -3 receptor**

22/3,K/4 (Item 1 from file: 34)

DIALOG(R)File 34:SciSearch(R) Cited Ref Sci
(c) 2004 Inst for Sci Info. All rts. reserv.

11245850 Genuine Article#: 627GF No. References: 35

Title: Alteration of dorsal root ganglion P2X (3) receptor expression and function following spinal nerve ligation in the rat

Author(s): Kage K; Niforatos W; Zhu CZ; Lynch KJ; Honore P; Jarvis MF
(REPRINT)

Corporate Source: Abbott Labs,Global Pharmaceutical Res & Dev,100 Abbott Pk Rd/Abbott Pk//IL/60064 (REPRINT); Abbott Labs,Global Pharmaceutical Res & Dev,Abbott Pk//IL/60064

Journal: EXPERIMENTAL BRAIN RESEARCH, 2002, V147, N4 (DEC), P511-519

ISSN: 0014-4819 Publication date: 20021200

Publisher: SPRINGER-VERLAG, 175 FIFTH AVE, NEW YORK, NY 10010 USA

Language: English Document Type: ARTICLE (ABSTRACT AVAILABLE)

Title: Alteration of dorsal root ganglion P2X (3) receptor expression and function following spinal nerve ligation in the rat

Abstract: One subtype of ATP-gated ion channel, the **P2X (3) receptor**, is expressed primarily on peripheral sensory neurons. While it is known that P2X(3) receptors can participate in certain forms of nociceptive signaling, their involvement in **neuropathic pain** transmission is not known. We have examined the expression and function of P2X3 receptors in a rat spinal nerve ligation model of **neuropathic pain**. Fourteen days following L5/L6 spinal nerve ligation, the corresponding dorsal root ganglia (DRG) were...

...these were studied using immunohistochemical and electrophysiological techniques. Using a polyclonal antibody to label the **P2X (3) receptor**, a significant reduction in neuronal P2X(3) immunoreactivity was observed in the ipsilateral (injured) L5...

...Identifiers--SENSORY NEURONS; PURINERGIC SENSITIVITY; PERIPHERAL NEUROPATHY; **TACTILE ALLODYNIA**; ATP; INJURY; PAIN; NOCICEPTION; CURRENTS; BEHAVIOR

22/3,K/5 (Item 1 from file: 71)

DIALOG(R)File 71:ELSEVIER BIOBASE
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02545976 2004014674

Effects of A-317491, a novel and selective P2XSUB3/ P2X SUB2/3 receptor antagonist, on neuropathic, inflammatory and chemogenic nociception following intrathecal and intraplantar administration

McGaraughty S.; Wismer C.T.; Zhu C.Z.; Mikusa J.; Honore P.; Chu K.L.; Lee C.-H.; Faltynek C.R.; Jarvis M.F.

ADDRESS: S. McGaraughty, Neuroscience Research, Global Pharmaceutical R. and D., Abbott Laboratories, 100 Abbott Park Road, Abbott Park, IL 60064-6118, United States

EMAIL: Steve.P.Mcgaraughty@abbott.com

Journal: British Journal of Pharmacology, 140/8 (1381-1388), 2003, United Kingdom

CODEN: BJPCB

ISSN: 0007-1188

DOCUMENT TYPE: Article

LANGUAGES: English SUMMARY LANGUAGES: English

NO. OF REFERENCES: 48

Effects of A-317491, a novel and selective P2XSUB3/ P2X SUB2/3 receptor antagonist, on neuropathic, inflammatory and chemogenic nociception following intrathecal and intraplantar administration

...homomeric and P2XSUB2/3 heteromeric channels, is antinociceptive in rat models of chronic inflammatory and **neuropathic pain** . In an effort to further evaluate the role of P2XSUB3/P2XSUB2/3 receptors in nociceptive...

...formalin assay (intrathecal EDSUB50 = 10 nmol, intraplantar EDSUB50 > 300 nmol). Nocifensive behaviors induced by the **P2X receptor** agonist alpha,beta-meATP were also significantly reduced by intraplantar injection of A-317491. 5...

...Intrathecal administration of A-317491 appears to be more effective than intraplantar administration to reduce **tactile allodynia** following peripheral nerve injury.

? ds

Set	Items	Description
S1	0	P2X(2)RECEPTOR
S2	10	P(2)X (N2) RECEPTOR
S3	5539	P2X (N2)RECEPTOR
S4	5539	"P2X" (N2) RECEPTOR
S5	277	P2X4 (N2) RECEPTOR
S6	383	S3 (N2) ANTAGONIST
S7	383	S4 (N2)ANTAGONIST
S8	390	S3 (N2) AGONIST
S9	390	S4 (N2)AGONIST
S10	2	S5 (N2) ANTAGONIST
S11	15	S5 (N2)AGONIST
S12	1	S10 (N5)INHIBIT?
S13	0	S11 (N5)INHIBIT?
S14	19158	NEUROPATHIC (N2) PAIN
S15	1570	TACTILE (N2)ALLODYNIA
S16	932	S14 AND S15
S17	344	RD (unique items)
S18	2	S17 AND S5
S19	148	17 AND S4
S20	76	RD (unique items)
S21	5	S17 AND S4
S22	5	RD (unique items)

? s s5 and ion()flux

277 S5
3041345 ION
826448 FLUX
10506 ION(W)FLUX

S23 0 S5 AND ION()FLUX

? s s4 and ion()flux

5539 S4
3041345 ION
826448 FLUX
10506 ION(W)FLUX

S24 9 S4 AND ION()FLUX

? rd

...completed examining records

S25 5 RD (unique items)

? t/3,k/all

>>>KWIC option is not available in file(s): 399

25/3,K/1 (Item 1 from file: 5)

DIALOG(R)File 5:Biosis Previews(R)
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0013546378 BIOSIS NO.: 200200139889

Potent P2X7 receptor antagonists: Tyrosyl derivatives synthesized using a sequential parallel synthetic approach

AUTHOR: Ravi R Gnana; Kertesy Sylvia B; Dubyak George R; Jacobson Kenneth A
(Reprint)

AUTHOR ADDRESS: Molecular Recognition Section, LBC, NIH, NIDDK, Bldg. 8A,
Rm. B1A-19, Bethesda, MD, 20892-0810, USA**USA

~~JOURNAL: Drug Development Research 54 (2): p75-87 October, 2001-2001~~

MEDIUM: print

ISSN: 0272-4391

DOCUMENT TYPE: Article

RECORD TYPE: Abstract

LANGUAGE: English

...ABSTRACT: MRS2306), displayed an IC50 value of 40 nM as an antagonist of P2X7 receptor-mediated **ion flux** and was more potent than the reference compound 1. Nalpa-Cbz, Boc-piperaziny derivatives, 11...

DESCRIPTORS:

CHEMICALS & BIOCHEMICALS: ... **P2X -7 receptor antagonists**

25/3,K/2 (Item 2 from file: 5)

DIALOG(R)File 5:Biosis Previews(R)
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0013178607 BIOSIS NO.: 200100350446

Structure-activity relationships of pyridoxal phosphate derivatives as potent and selective antagonists of P2X1 receptors

AUTHOR: Kim Yong-Chul; Brown Sean G; Harden T Kendall; Boyer Jose L; Dubyak George; King Brian F; Burnstock Geoffrey; Jacobson Kenneth A (Reprint)

AUTHOR ADDRESS: NIDDK, LBC, NIH, Bldg. 8A, Rm. B1A-19, Bethesda, MD,
20892-0810, USA**USA

~~JOURNAL: Journal of Medicinal Chemistry 44 (3): p340-349 February 1, 2001~~

MEDIUM: print

ISSN: 0022-2623

DOCUMENT TYPE: Article

RECORD TYPE: Abstract

LANGUAGE: English

...ABSTRACT: in functional assays at recombinant rat P2X1, P2X2, and P2X3 receptors expressed in Xenopus oocytes (**ion flux** stimulation) and at turkey erythrocyte P2Y1 receptors (phospholipase C activation). Selected compounds were also evaluated as antagonists of **ion flux** and the opening of a large pore at the recombinant human P2X7 receptor. Modifications were...

DESCRIPTORS:

CHEMICALS & BIOCHEMICALS: **P2X -1 receptor ; ...**

... **P2X -2 receptor ; ...**

... **P2X -3 receptor ; ...**

... **P2X -7 receptor ; ...**

... **P2X -1 receptor** antagonist agent, structure-activity relationships, synthesis

25/3,K/3 (Item 1 from file: 73)
DIALOG(R)File 73:EMBASE
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11446733 EMBASE No: 2002018334

Potent P2XSUB7 receptor antagonists: Tyrosyl derivatives synthesized using a sequential parallel synthetic approach

Ravi R.G.; Kertesz S.B.; Dubyak G.R.; Jacobson K.A.
K.A. Jacobson, Molecular Recognition Section, NIH, NIDDK, Bethesda, MD
20892-0810 United States
AUTHOR EMAIL: kajacobs@helix.nih.gov
Drug Development Research (DRUG DEV. RES.) (United States) 2001, 54/2
(75-87)
CODEN: DDRED ISSN: 0272-4391
DOCUMENT TYPE: Journal ; Article
LANGUAGE: ENGLISH SUMMARY LANGUAGE: ENGLISH
NUMBER OF REFERENCES: 32

...MRS2306), displayed an IC50 value of 40 nM as an antagonist of P2XSUB7 receptor-mediated **ion flux** and was more potent than the reference compound 1. NSUPalpha-Cbz, Boc-piperazinyl derivatives, 11...

DRUG DESCRIPTORS:

*purine **P2X receptor** ; *purinergic **receptor** blocking agent--drug analysis--an; *purinergic receptor blocking agent--drug comparison--cm; *purinergic receptor blocking...

25/3,K/4 (Item 2 from file: 73)
DIALOG(R)File 73:EMBASE
(c) 2004 Elsevier Science B.V. All rts. reserv.

11057087 EMBASE No: 2001048256

Structure-activity relationships of pyridoxal phosphate derivatives as potent and selective antagonists of P2XSUB1 receptors

Kim Y.-C.; Brown S.G.; Harden T.K.; Boyer J.L.; Dubyak G.; King B.F.; Burnstock G.; Jacobson K.A.
Dr. K.A. Jacobson, MRS, NIH, NIDDK, Bethesda, MD 20892-0810 United States
AUTHOR EMAIL: kajacobs@helix.nih.gov
Journal of Medicinal Chemistry (J. MED. CHEM.) (United States) 01 FEB 2001, 44/3 (340-349)
CODEN: JMCMA ISSN: 0022-2623
DOCUMENT TYPE: Journal ; Article
LANGUAGE: ENGLISH SUMMARY LANGUAGE: ENGLISH
NUMBER OF REFERENCES: 43

...in functional assays at recombinant rat P2XSUB1, P2XSUB2, and P2XSUB3 receptors expressed in Xenopus oocytes (**ion flux** stimulation) and at turkey erythrocyte P2YSUB1 receptors (phospholipase C activation). Selected compounds were also evaluated as antagonists of **ion flux** and the opening of a large pore at the recombinant human P2XSUB7 receptor. Modifications were...

DRUG DESCRIPTORS:

...*drug analysis--an; *pyridoxal 5 phosphate--drug development--dv; *pyridoxal 5 phosphate--pharmacology--pd; *purine **P2X receptor** --endogenous compound--ec

25/3,K/5 (Item 1 from file: 370)
DIALOG(R)File 370:Science
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00500325 (USE 9 FOR FULLTEXT)

The Cytolytic P.inf(2Z) Receptor for Extracellular ATP Identified as a P.inf(2X) Receptor (P2X .inf(7))

Surprenant, A.; Rassendren, F.; Kawashima, E.; North, R. A.; Buell, G.
Glaxo Institute for Molecular Biology, Plan-les-Ouates, 1228 Geneva,
Switzerland.

~~Science Vol. 272 5262 pp. 735~~

Publication Date: 5-03-1996 (960503) Publication Year: 1996

Document Type: Journal ISSN: 0036-8075

Language: English

Section Heading: Reports

Word Count: 2485

(THIS IS THE FULLTEXT)

The Cytolytic P.inf(2Z) Receptor for Extracellular ATP Identified as a P.inf(2X) Receptor (P2X .inf(7)) ...

...Abstract: channels, the P.inf(2X) receptors, are permeable only to small cations. Here, an ATP **receptor**, the **P2X .inf(7) receptor**, was cloned from rat brain and exhibited both these properties. This protein is homologous to...

...Text: Here, we isolated a **P2X receptor** complementary DNA (cDNA) (P2X.inf(7)) that encodes a 595-amino acid protein (Fig. 1...

...two transmembrane domains, and a large extracellular loop (B8) . The COOH-terminal domain of the **P2X .inf(7) receptor** was much longer than that found in the other receptors but contained no further hydrophobic...

...span the membrane and showed no sequence homology with known proteins. The mRNA for the **P2X .inf(7) receptor** was strongly expressed in J774 and P815 macrophages, in microglia, brain, spinal cord, lung, and...

...to 2 s) of ATP evoked inward currents in HEK 293 cells into which the **P2X .inf(7) receptor** was transiently or stably transfected (Fig. 1B) (B10) . The agonist order of potency was BzATP...

...C and D). Antagonists had similar effects on J774 cells and HEK cells expressing the **P2X .inf(7) receptor** : currents evoked by 30 (mu) M BzATP were relatively insensitive to the purinoceptor antagonist suramin...

...inf(2Z) receptors (B2) , was ineffective (100 (mu) M, n = 6) at blocking current. The **P2X .inf(7) receptor** thus presents a pharmacological profile typical of the receptor previously termed P.inf(2Z) (B1The P.inf(2Z) receptor has been characterized primarily by **ion flux** and dye uptake studies in macrophage-derived cell lines such as J774, particularly with the...

...4C) and did not cause uptake of YO-PRO-1 by HEK cells expressing the **P2X .inf(2) receptor** (Fig. 4, D through F). We tested the hypothesis that the unique COOH-terminal domain conferred these properties by repeating the experiments on HEK cells expressing the **P2X .inf(7) receptor** truncated to 418 amino acids (P2X.inf(7) (Delta) C, Fig. 1A). Agonist and antagonist ...

...Thus, the expression of a single protein, the **P2X .inf(7) receptor** ,

endows cells with two distinct responses to ATP and its analog BzATP. The first, a...

...with other proteins intrinsic to HEK 293 cells might confer the cytolytic properties of the **P2X₂ receptor** (B2). Any such protein must be ubiquitous because we obtained qualitatively similar results from Chinese...

...receptor as a member of the P₂ family. The dual function of the **P2X₂ receptor**, whereby it can operate both as an ion channel selective for small cations and in Figure F1

Caption: (A) Predicted amino acid sequence of the **P2X₂ receptor**, aligned with that of the **P2X₂ receptor** (B2). The middle line shows common amino acids, lines over the top sequence indicate probable...

...ATP and ATP analogs (as indicated) in low divalent solution obtained from cells expressing the **P2X₂ receptor**. (C and D) Similar experiments on J774 cells; low divalent solutions also increased both amplitude...

...BzATP induced a sustained nonselective conductance. In (D), currents were recorded from HEK cells expressing **P2X₂ receptor** in response to four 1-s applications of BzATP, with an interval of 12 min...2), or no receptors (Untrans.). BzATP concentration was 30 μ M for experiments with the **P2X₂ receptor** and 300 μ M for all others (n = 6 throughout...

References and Notes:

...RACE-PCR; Life Technologies, Bethesda, MD) using poly(A)⁺ RNA from the medial habenula. **P2X₂ receptor**-specific sequences were amplified with two rounds of nested PCR, for which sense primers were CCACGCGTCGACTAGTACGGGIIGGGIIGand...

? ds

Set	Items	Description
S1	0	P2X(2)RECEPTOR
S2	10	P(2)X (N2) RECEPTOR
S3	5539	P2X (N2)RECEPTOR
S4	5539	"P2X" (N2) RECEPTOR
S5	277	P2X4 (N2) RECEPTOR
S6	383	S3 (N2) ANTAGONIST
S7	383	S4 (N2)ANTAGONIST
S8	390	S3 (N2) AGONIST
S9	390	S4 (N2)AGONIST
S10	2	S5 (N2) ANTAGONIST
S11	15	S5 (N2)AGONIST
S12	1	S10 (N5)INHIBIT?
S13	0	S11 (N5)INHIBIT?
S14	19158	NEUROPATHIC(N2)PAIN
S15	1570	TACTILE(N2)ALLODYNIA
S16	932	S14 AND S15
S17	344	RD (unique items)
S18	2	S17 AND S5
S19	148	17 AND S4
S20	76	RD (unique items)
S21	5	S17 AND S4
S22	5	RD (unique items)
S23	0	S5 AND ION()FLUX
S24	9	S4 AND ION()FLUX
S25	5	RD (unique items)

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Processing
Processed 10 of 29 files ...
Completed processing all files
390 S9
6944746 INHIBIT?
S26 194 S9 AND INHIBIT?
? s s9 (N5) inhibit?
Processing
Processed 20 of 29 files ...
Completed processing all files
390 S9
6944746 INHIBIT?
S27 5 S9 (N5) INHIBIT?
? t/3,k/all
>>>KWIC option is not available in file(s): 399

27/3,K/1 (Item 1 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)
(c) 2004 BIOSIS. All rts. reserv.

0012728953 BIOSIS NO.: 200000447266
Influence of purinoceptor antagonism on diadenosine pentaphosphate-induced hypotension in anesthetized rats
AUTHOR: Steinmetz Martin; Van Le Truc; Hollah Peter; Gabrieels Gert; Hohage Helge; Rahn Karl Heinz; Schlatter Eberhard (Reprint)
AUTHOR ADDRESS: Medizinische Poliklinik, Experimentelle Nephrologie, Westfaelische Wilhelms-Universitaet, Domagkstrasse 3a, 48149, Muenster, Germany**Germany
~~JOURNAL: Journal of Pharmacology and Experimental Therapeutics 294-(3):p~~
963-968 September, 2000 2000
MEDIUM: print
ISSN: 0022-3565
DOCUMENT TYPE: Article
RECORD TYPE: Abstract
LANGUAGE: English

...ABSTRACT: the A2 purinoceptor antagonist 3,7-dimethyl-1-propargylxanthine. The hypertensive effect by the prototype **P2X receptor agonist** alphabeta-methylene ATP was **inhibited** by pyridoxal-phosphate-6-azophenyl-2',4'-disulfonic acid, too. Purinoceptor antagonists reduced the maximal...

27/3,K/2 (Item 1 from file: 34)
DIALOG(R)File 34:SciSearch(R) Cited Ref Sci
(c) 2004 Inst for Sci Info. All rts. reserv.

08949362 Genuine Article#: 347QH No. References: 25
Title: Influence of purinoceptor antagonism on diadenosine pentaphosphate-induced hypotension in anesthetized rats
Author(s): Steinmetz M; Le VT; Hollah P; Gabriels G; Hohage H; Rahn KH; Schlatter E (REPRINT)
Corporate Source: UNIV MUNSTER,MED POLIKLIN, DOMAGKSTR 3A/D-48149 MUNSTER//GERMANY/ (REPRINT); UNIV MUNSTER,MED POLIKLIN/D-48149 MUNSTER//GERMANY/
Journal: JOURNAL OF PHARMACOLOGY AND EXPERIMENTAL THERAPEUTICS, 2000, V294, N3 (SEP), P963-968
ISSN: 0022-3565 Publication date: 20000900
Publisher: AMER SOC PHARMACOLOGY EXPERIMENTAL THERAPEUTICS, 9650 ROCKVILLE PIKE, BETHESDA, MD 20814-3998
Language: English Document Type: ARTICLE (ABSTRACT AVAILABLE)

...Abstract: A(2) purinoceptor antagonist 3,7-dimethyl-1-propargylxanthine, The hypertensive effect by the prototype **P2X receptor agonist** alpha beta-methylene ATP was **inhibited** by pyridoxal-phosphate-6-azophenyl-2',4'-disulfonic acid, too. Purinoceptor antagonists reduced the maximal...

27/3,K/3 (Item 1 from file: 71)
DIALOG(R)File 71:ELSEVIER BIOBASE
(c) 2004 Elsevier Science B.V. All rts. reserv.

01521425 2000200567
Influence of purinoceptor antagonism on diadenosine pentaphosphate-induced hypotension in anesthetized rats
Steinmetz M.; Le T.V.; Hollah P.; Gabriels G.; Hohage H.; Rahn K.H.; Schlatter E.
ADDRESS: Dr. E. Schlatter, Medizinische Poliklinik, Experimentelle Nephrologie, Westfälische Wilhelms-Universität, Domagkstrasse 3a, 48149 Münster, Germany
EMAIL: eberhard.schlatter@uni-muenster.de
Journal: Journal of Pharmacology and Experimental Therapeutics, 294/3 (963-968), 2000, United States
CODEN: JPETA
ISSN: 0022-3565
DOCUMENT TYPE: Article
LANGUAGES: English SUMMARY LANGUAGES: English
NO. OF REFERENCES: 25

...Ainf 2 purinoceptor antagonist 3,7-dimethyl-1-propargylxanthine. The hypertensive effect by the prototype **P2X receptor agonist** alphabeta-methylene ATP was **inhibited** by pyridoxal-phosphate-6-azophenyl-2',4'-disulfonic acid, too. Purinoceptor antagonists reduced the maximal...

27/3,K/4 (Item 1 from file: 73)
DIALOG(R)File 73:EMBASE
(c) 2004 Elsevier Science B.V. All rts. reserv.

10829046 EMBASE No: 2000309756
Influence of purinoceptor antagonism on diadenosine pentaphosphate-induced hypotension in anesthetized rats
Steinmetz M.; Le T.V.; Hollah P.; Gabriels G.; Hohage H.; Rahn K.H.; Schlatter E.
Dr. E. Schlatter, Medizinische Poliklinik, Experimentelle Nephrologie, Westfälische Wilhelms-Universität, Domagkstrasse 3a, 48149 Münster Germany
AUTHOR EMAIL: eberhard.schlatter@uni-muenster.de
Journal of Pharmacology and Experimental Therapeutics (J. PHARMACOL. EXP. THER.) (United States) 2000, 294/3 (963-968)
CODEN: JPETA ISSN: 0022-3565
DOCUMENT TYPE: Journal; Article
LANGUAGE: ENGLISH SUMMARY LANGUAGE: ENGLISH
NUMBER OF REFERENCES: 25

...Ainf 2 purinoceptor antagonist 3,7-dimethyl-1-propargylxanthine. The hypertensive effect by the prototype **P2X receptor agonist** alphabeta-methylene ATP was **inhibited** by pyridoxal-phosphate-6-azophenyl-2',4'-disulfonic acid, too. Purinoceptor

antagonists reduced the maximal...

27/3,K/5 (Item 1 from file: 155)
DIALOG(R)File 155:MEDLINE(R)
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10820877 PMID: 10945847

Influence of purinoceptor antagonism on diadenosine pentaphosphate-induced hypotension in anesthetized rats.

Steinmetz M; van Le T; Hollah P; Gabriels G; Hohage H; Rahn K H; Schlatter E

Medizinische Poliklinik, Experimentelle Nephrologie, Westfälische Wilhelms-Universität, Münster, Germany.

Journal of pharmacology and experimental therapeutics (UNITED STATES)

Sep 2000, 294 (3) p963-8, ISSN 0022-3565 Journal Code: 0376362

Document type: Journal Article

Languages: ENGLISH

Main Citation Owner: NLM

Record type: Completed

... A(2) purinoceptor antagonist 3, 7-dimethyl-1-propargylxanthine. The hypertensive effect by the prototype **P2X receptor agonist** alphabeta-methylene ATP was **inhibited** by pyridoxal-phosphate-6-azophenyl-2',4'-disulfonic acid, too. Purinoceptor antagonists reduced the maximal

...
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Set	Items	Description
S1	0	P2X(2)RECEPTOR
S2	10	P()2()X (N2) RECEPTOR
S3	5539	P2X (N2)RECEPTOR
S4	5539	"P2X" (N2) RECEPTOR
S5	277	P2X4 (N2) RECEPTOR
S6	383	S3 (N2) ANTAGONIST
S7	383	S4 (N2)ANTAGONIST
S8	390	S3 (N2) AGONIST
S9	390	S4(N2)AGONIST
S10	2	S5 (N2) ANTAGONIST
S11	15	S5 (N2)AGONIST
S12	1	S10(N5)INHIBIT?
S13	0	S11(N5)INHIBIT?
S14	19158	NEUROPATHIC(N2)PAIN
S15	1570	TACTILE(N2)ALLODYNIA
S16	932	S14 AND S15
S17	344	RD (unique items)
S18	2	S17 AND S5
S19	148	17 AND S4
S20	76	RD (unique items)
S21	5	S17 AND S4
S22	5	RD (unique items)
S23	0	S5 AND ION()FLUX
S24	9	S4 AND ION()FLUX
S25	5	RD (unique items)
S26	194	S9 AND INHIBIT?
S27	5	S9 (N5) INHIBIT?

? s s7(N5)inhibit?

Processed 20 of 29 files ...

Processing

Completed processing all files

383 S7

6944746 INHIBIT?
S28 27 S7(N5)INHIBIT?
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...completed examining records
S29 10 RD (unique items)
? t/3,k/all
>>>KWIC option is not available in file(s): 399

29/3,K/1 (Item 1 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)
(c) 2004 BIOSIS. All rts. reserv.

0014527335 BIOSIS NO.: 200300496054
Unusual absence of endothelium-dependent or -independent vasodilatation to purines or pyrimidines in the rat renal artery.
AUTHOR: Knight Gillian E; Oliver-Redgate Rachel; Burnstock Geoffrey
(Reprint)
AUTHOR ADDRESS: Medical School, Autonomic Neuroscience Institute, Royal Free and University College, Rowland Hill Street, Royal Free Campus, London, NW3 2PF, UK**UK
AUTHOR E-MAIL ADDRESS: g.burnstock@ucl.ac.uk
JOURNAL: Kidney International 64 (4): p1389-1397 October 2003 2003
MEDIUM: print
ISSN: 0085-2538 (ISSN print)
DOCUMENT TYPE: Article
RECORD TYPE: Abstract
LANGUAGE: English

...ABSTRACT: of P2X and P2Y receptor subtypes was performed. Results: Electrical field stimulation induced vasoconstriction, partially **inhibited** by the **P2X receptor antagonist**, pyridoxalphosphate-6-azophenyl-2',4'-disulfonic acid, and predominantly by prazosin. Exogenous NA and ATP...

29/3,K/2 (Item 2 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)
(c) 2004 BIOSIS. All rts. reserv.

0013376178 BIOSIS NO.: 200100548017
Purinergic co-transmission in postnatal mouse lateral hypothalamus in vitro
AUTHOR: Jo Y H (Reprint); Role L W (Reprint)
AUTHOR ADDRESS: Dept Anat and Cell Biol Ctr Neruobiol, Columbia Univ Col Physicians and Surgeons, New York, NY, USA**USA
JOURNAL: Society for Neuroscience Abstracts 27 (2): p1572 2001 2001
MEDIUM: print
CONFERENCE/MEETING: 31st Annual Meeting of the Society for Neuroscience San Diego, California, USA November 10-15, 2001; 20011110
ISSN: 0190-5295
DOCUMENT TYPE: Meeting; Meeting Abstract
RECORD TYPE: Abstract
LANGUAGE: English

DESCRIPTORS:
CHEMICALS & BIOCHEMICALS: ... **P2X receptor antagonist**, current **inhibitor** ; ...

... **P2X receptor antagonist**, current **inhibitor**

29/3,K/3 (Item 3 from file: 5)

DIALOG(R)File 5:Biosis Previews(R)
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0012536936 BIOSIS NO.: 200000255249

Effect of age on the responses of rat bladder detrusor strips to adenosine triphosphate

AUTHOR: Kageyama S (Reprint); Fujita K; Suzuki K; Shinbo H; Masuda N; Uchida W

AUTHOR ADDRESS: 3600 Handa-cho, Hamamatsu-shi, Shizuoka-ken, Japan**Japan

JOURNAL: BJU International 85 (7): p899-904 May, 2000 2000

MEDIUM: print

ISSN: 1464-4096

DOCUMENT TYPE: Article

RECORD TYPE: Abstract

LANGUAGE: English

...ABSTRACT: did not significantly inhibit the phasic contraction, but reduced the postwashout contraction. PPADS (a selective **P2X receptor antagonist**) did not **inhibit** either contraction. Indomethacin (a prostaglandin synthesis inhibitor) had no effect on the phasic contraction but...

29/3,K/4 (Item 4 from file: 5)

DIALOG(R)File 5:Biosis Previews(R)
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0011806702 BIOSIS NO.: 199900066362

ATP P2X receptors and sensory synaptic transmission between primary afferent fibers and spinal dorsal horn neurons in rats

AUTHOR: Li Ping; Calejesan Amelita A; Zhuo Min

AUTHOR ADDRESS: Dep. Anesthesiol., Washington Univ., Sch. Med., St. Louis, MO 63110-1093, USA**USA

JOURNAL: Journal of Neurophysiology (Bethesda) 80 (6): p3356-3360 Dec., 1998 1998

MEDIUM: print

ISSN: 0022-3077

DOCUMENT TYPE: Article

RECORD TYPE: Abstract

LANGUAGE: English

...ABSTRACT: the lumbar spinal cord. Pyridoxal-phosphate-6-azophenyl-2',4'-disulfonic acid (PPADS), a selective **P2X receptor antagonist**, produced an **inhibitory** modulatory effect on fast EPSCs and altered responses to paired-pulse stimulation, suggesting the involvement...

29/3,K/5 (Item 5 from file: 5)

DIALOG(R)File 5:Biosis Previews(R)
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0010688008 BIOSIS NO.: 199799322068

P2X purinoceptors in cultured myenteric neurons of guinea-pig small intestine

AUTHOR: Zhou Xiaoping; Galligan James J (Reprint)

AUTHOR ADDRESS: Dep. Pharmacology Toxicology, Michigan State Univ., East Lansing, MI, USA**USA

JOURNAL: Journal of Physiology (Cambridge) 496 (3): p719-729 1996 1996

ISSN: 0022-3751
DOCUMENT TYPE: Article
RECORD TYPE: Abstract
LANGUAGE: English

...ABSTRACT: 100 μ M) partly inhibited f-EPSCs in 28% of neurons.
Hexamethonium-resistant fEPSCs were **inhibited** by 97 \pm 2% by the **P2X receptor antagonist**, pyridoxal-phosphate-6-azophenyl-2',4'-disulphonic acid (PPADS, 10 μ M). 2. ATP caused...

29/3,K/6 (Item 1 from file: 34)

DIALOG(R)File 34:SciSearch(R) Cited Ref Sci
(c) 2004 Inst for Sci Info. All rts. reserv.

12511896 Genuine Article#: 774FM No. References: 31

Title: Desensitization masks nanomolar potency of ATP for the P2X(1) receptor

Author(s): Rettinger J; Schmalzing G (REPRINT)

Corporate Source: Rhein Westfal TH Aachen, Sch Med, Dept Mol

Pharmacol, Wendlingweg 2/D-52074 Aachen//Germany/ (REPRINT); Rhein

Westfal TH Aachen, Sch Med, Dept Mol Pharmacol, D-52074 Aachen//Germany/;

Max Planck Inst Biophys, D-60439 Frankfurt//Germany/

Journal: JOURNAL OF BIOLOGICAL CHEMISTRY, 2004, V279, N8 (FEB 20), P
6426-6433

ISSN: 0021-9258 Publication date: 20040220

Publisher: AMER SOC BIOCHEMISTRY MOLECULAR BIOLOGY INC, 9650 ROCKVILLE

PIKE, BETHESDA, MD 20814-3996 USA

Language: English Document Type: ARTICLE (ABSTRACT AVAILABLE)

...Abstract: P2X(2)/P2X(1) chimera and the P2X(1) receptor possess
virtually identical sensitivity to **inhibition** by the **P2X (1) receptor** -selective **antagonist** NF279, a suramin analog. These results
suggest that the P2X(1), ectodomain confers nanomolar ATP...

29/3,K/7 (Item 2 from file: 34)

DIALOG(R)File 34:SciSearch(R) Cited Ref Sci
(c) 2004 Inst for Sci Info. All rts. reserv.

11302902 Genuine Article#: 635LK No. References: 58

Title: Mechanisms of P2X(7) receptor-mediated ERK1/2 phosphorylation in human astrocytoma cells

Author(s): Gendron FP (REPRINT) ; Neary JT; Theiss PM; Sun GY; Gonzalez FA;
Weisman GA

Corporate Source: Univ Missouri, Dept Biochem, M121 Med Sci

Bldg/Columbia//MO/65212 (REPRINT); Univ Missouri, Dept

Biochem, Columbia//MO/65212; Univ Miami, Vet Affairs Med Ctr, Res Serv,

Sch Med, Miami//FL/33125; Univ Miami, Dept Pathol, Sch

Med, Miami//FL/33125; Univ Miami, Dept Biochem & Mol Biol, Sch

Med, Miami//FL/33125; Univ Miami, Neurosci Program, Sch

Med, Miami//FL/33125; Univ Puerto Rico, Dept Chem, Rio Piedras//PR/00931

Journal: AMERICAN JOURNAL OF PHYSIOLOGY-CELL PHYSIOLOGY, 2003, V284, N2 (FEB), PC571-C581

ISSN: 0363-6143 Publication date: 20030200

Publisher: AMER PHYSIOLOGICAL SOC, 9650 ROCKVILLE PIKE, BETHESDA, MD 20814
USA

Language: English Document Type: ARTICLE (ABSTRACT AVAILABLE)

...Abstract: cells overexpressing the recombinant rat P2X(7) receptor

(rP2X(7)-R), a response that was **inhibited** by the **P2X (7) receptor antagonist**, oxidized ATP. Other results suggest that rP2X(7)-R-mediated ERK1/2 phosphorylation was linked...

29/3,K/8 (Item 3 from file: 34)
DIALOG(R)File 34:SciSearch(R) Cited Ref Sci
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10093469 Genuine Article#: 483EP No. References: 22
Title: Differential responses to ATP gamma S in the mesenteric and hindlimb vascular bed of the cat
Author(s): Shah MK (REPRINT) ; Champion HC; Bivalacqua TJ; Kadowitz PJ
Corporate Source: 10 Summer St,Apt 303S/Malden//MA/02148 (REPRINT); Tulane Univ,Sch Med, Dept Pharmacol,New Orleans//LA/70112
Journal: LIFE SCIENCES, 2001, V69, N21 (OCT 12), P2561-2571
ISSN: 0024-3205 Publication date: 20011012
Publisher: PERGAMON-ELSEVIER SCIENCE LTD, THE BOULEVARD, LANGFORD LANE, KIDLINGTON, OXFORD OX5 1GB, ENGLAND
Language: English Document Type: ARTICLE (ABSTRACT AVAILABLE)

...Abstract: In the mesenteric vascular bed the pressor response to ATP gammaS was blocked by a **P2X (1) receptor antagonist**. Also an **inhibitor** of nitric oxide synthase enhanced the vasoconstrictive responses to ATP gammaS. However, the vasodepressor response...

29/3,K/9 (Item 4 from file: 34)
DIALOG(R)File 34:SciSearch(R) Cited Ref Sci
(c) 2004 Inst for Sci Info. All rts. reserv.

06939195 Genuine Article#: 105WG No. References: 17
Title: 2',3'-O-(2,4,6-trinitrophenyl)adenosine 5'-triphosphate (TNP-ATP) - a nanomolar affinity antagonist at rat mesenteric artery P2X receptor ion channels
Author(s): Lewis CJ; Surprenant A; Evans RJ (REPRINT)
Corporate Source: UNIV LEICESTER,DEPT CELL PHYSIOL & PHARMACOL, MED SCI BLDG, UNIV RD/LEICESTER LE1 9HN/LEICS/ENGLAND/ (REPRINT); UNIV LEICESTER,DEPT CELL PHYSIOL & PHARMACOL/LEICESTER LE1 9HN/LEICS/ENGLAND/; GENEVA BIOMED RES INST,/GENEVA//SWITZERLAND/
~~Journal: BRITISH JOURNAL OF PHARMACOLOGY, 1998, V124, N7 (AUG), Pt463-1466~~
ISSN: 0007-1188 Publication date: 19980800
Publisher: STOCKTON PRESS, HOUNDMILLS, BASINGSTOKE RG21 6XS, HAMPSHIRE, ENGLAND
Language: English Document Type: ARTICLE (ABSTRACT AVAILABLE)

...Abstract: smooth muscle cells and contractions of whole artery rings.

2 The selective P2X(1) and **P2X (3) receptor antagonist** TNP-ATP **inhibited** P2X receptor mediated inward currents in response to 3 μ M alpha,beta-meATP (an...

29/3,K/10 (Item 1 from file: 144)
DIALOG(R)File 144:Pascal
(c) 2004 INIST/CNRS. All rts. reserv.

16063767 PASCAL No.: 03-0213415
Mechanisms of P2X SUB 7 receptor-mediated ERK1/2 phosphorylation in human astrocytoma cells

GENDRON Fernand-Pierre; NEARY Joseph T; THEISS Patty M; SUN Grace Y;
GONZALEZ Fernando A; WEISMAN Gary A

Department of Biochemistry, University of Missouri-Columbia, Columbia,
Missouri 65212, United States; Research Service, Veterans Affairs Medical
Center, Departments of Pathology, Biochemistry and Molecular Biology, and
the Neuroscience Program, University of Miami School of Medicine, Miami,
Florida 33125, United States; Department of Chemistry, University of Puerto
Rico, Rio Piedras, Puerto Rico 00931, Argentina

Journal: American journal of physiology. Cell physiology, 2003, 53 (2)
C571-C581

Language: English

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... the recombinant rat P2X SUB 7 receptor (rP2X SUB 7 -R), a response
that was **inhibited** by the **P2X SUB 7 receptor antagonist**, oxidized
ATP. Other results suggest that rP2X SUB 7 -R-mediated ERK1/2
phosphorylation was...

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Set	Items	Description
S1	0	P2X(2)RECEPTOR
S2	10	P()2()X (N2) RECEPTOR
S3	5539	P2X (N2)RECEPTOR
S4	5539	"P2X" (N2) RECEPTOR
S5	277	P2X4 (N2) RECEPTOR
S6	383	S3 (N2) ANTAGONIST
S7	383	S4 (N2)ANTAGONIST
S8	390	S3 (N2) AGONIST
S9	390	S4(N2)AGONIST
S10	2	S5 (N2) ANTAGONIST
S11	15	S5 (N2)AGONIST
S12	1	S10(N5)INHIBIT?
S13	0	S11(N5)INHIBIT?
S14	19158	NEUROPATHIC(N2)PAIN
S15	1570	TACTILE(N2)ALLODYNIA
S16	932	S14 AND S15
S17	344	RD (unique items)
S18	2	S17 AND S5
S19	148	17 AND S4
S20	76	RD (unique items)
S21	5	S17 AND S4
S22	5	RD (unique items)
S23	0	S5 AND ION()FLUX
S24	9	S4 AND ION()FLUX
S25	5	RD (unique items)
S26	194	S9 AND INHIBIT?
S27	5	S9 (N5) INHIBIT?
S28	27	S7(N5)INHIBIT?
S29	10	RD (unique items)

? s s14(s)s7

19158 S14

383 S7

S30 0 S14(S)S7

? s s14(N10)s7

19158 S14

383 S7

S31 0 S14(N10)S7

? s s14(n10)s8

19158 S14

390 S8

S32 0 S14 (N10) S8
 ? ds

Set	Items	Description
S1	0	P2X(2) RECEPTOR
S2	10	P()2()X (N2) RECEPTOR
S3	5539	P2X (N2) RECEPTOR
S4	5539	"P2X" (N2) RECEPTOR
S5	277	P2X4 (N2) RECEPTOR
S6	383	S3 (N2) ANTAGONIST
S7	383	S4 (N2) ANTAGONIST
S8	390	S3 (N2) AGONIST
S9	390	S4 (N2) AGONIST
S10	2	S5 (N2) ANTAGONIST
S11	15	S5 (N2) AGONIST
S12	1	S10 (N5) INHIBIT?
S13	0	S11 (N5) INHIBIT?
S14	19158	NEUROPATHIC (N2) PAIN
S15	1570	TACTILE (N2) ALLODYNIA
S16	932	S14 AND S15
S17	344	RD (unique items)
S18	2	S17 AND S5
S19	148	17 AND S4
S20	76	RD (unique items)
S21	5	S17 AND S4
S22	5	RD (unique items)
S23	0	S5 AND ION() FLUX
S24	9	S4 AND ION() FLUX
S25	5	RD (unique items)
S26	194	S9 AND INHIBIT?
S27	5	S9 (N5) INHIBIT?
S28	27	S7 (N5) INHIBIT?
S29	10	RD (unique items)
S30	0	S14 (S) S7
S31	0	S14 (N10) S7
S32	0	S14 (N10) S8

? logoff

```

27may04 13:27:43 User276619 Session D5.2
  $13.73      2.451 DialUnits File5
    $36.75   21 Type(s) in Format  3
    $36.75   21 Types
$50.48 Estimated cost File5
  $1.35      0.229 DialUnits File6
  $1.35 Estimated cost File6
    $42.33    2.065 DialUnits File34
    $41.65    7 Type(s) in Format  3
    $41.65    7 Types
$83.98 Estimated cost File34
  $0.71      0.103 DialUnits File40
  $0.71 Estimated cost File40
    $1.83      0.407 DialUnits File50
    $2.00     1 Type(s) in Format  3
    $2.00     1 Types
  $3.83 Estimated cost File50
    $0.57      0.151 DialUnits File65
  $0.57 Estimated cost File65
    $6.13      0.771 DialUnits File71
    $3.30     3 Type(s) in Format  3
    $3.30     3 Types
  $9.43 Estimated cost File71
    $17.06     1.741 DialUnits File73
  
```

```

    $10.80  4 Type(s) in Format  3
$10.80  4 Types
$27.86  Estimated cost File73
    $1.31    0.374 DialUnits File94
$1.31  Estimated cost File94
    $0.60    0.249 DialUnits File98
    $1.65  1 Type(s) in Format  3
    $1.65  1 Types
$2.25  Estimated cost File98
    $2.00    0.391 DialUnits File103
$2.00  Estimated cost File103
    $0.33    0.139 DialUnits File143
$0.33  Estimated cost File143
    $4.81    1.376 DialUnits File144
    $3.30  2 Type(s) in Format  3
    $3.30  2 Types
$8.11  Estimated cost File144
    $6.68    2.089 DialUnits File155
    $0.63  3 Type(s) in Format  3
    $0.63  3 Types
$7.31  Estimated cost File155
    $3.31    0.619 DialUnits File156
    $0.95  1 Type(s) in Format  3
    $0.95  1 Types
$4.26  Estimated cost File156
    $1.08    0.240 DialUnits File162
$1.08  Estimated cost File162
    $1.81    0.184 DialUnits File172
$1.81  Estimated cost File172
    $1.01    0.130 DialUnits File305
$1.01  Estimated cost File305
    $0.31    0.090 DialUnits File369
$0.31  Estimated cost File369
    $0.59    0.168 DialUnits File370
    $1.50  1 Type(s) in Format  3
    $1.50  1 Types
$2.09  Estimated cost File370
$19.23  1.533 DialUnits File399
    $2.75  1 Type(s) in Format  3
    $2.75  1 Types
$21.98  Estimated cost File399
    $6.21    0.303 DialUnits File434
$6.21  Estimated cost File434
    $3.07    0.439 DialUnits File8
$3.07  Estimated cost File8
    $0.36    0.149 DialUnits File99
$0.36  Estimated cost File99
    $0.87    0.162 DialUnits File135
$0.87  Estimated cost File135
    $0.64    0.183 DialUnits File266
$0.64  Estimated cost File266
    $1.10    0.159 DialUnits File315
$1.10  Estimated cost File315
    $3.78    0.194 DialUnits File357
$3.78  Estimated cost File357
    $0.45    0.120 DialUnits File358
$0.45  Estimated cost File358
    OneSearch, 29 files, 17.209 DialUnits FileOS
    $6.75  TELNET
$255.29  Estimated cost this search
$255.34  Estimated total session cost  17.364 DialUnits

```

Logoff: level 04.09.00 D 13:27:43

You are now logged off